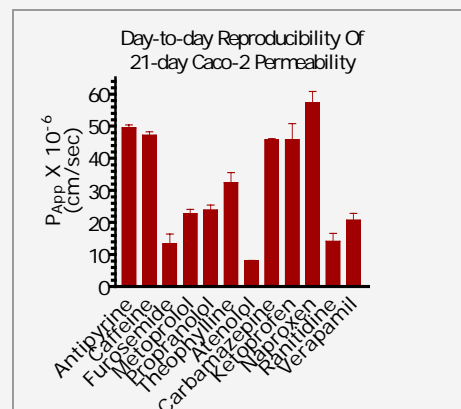
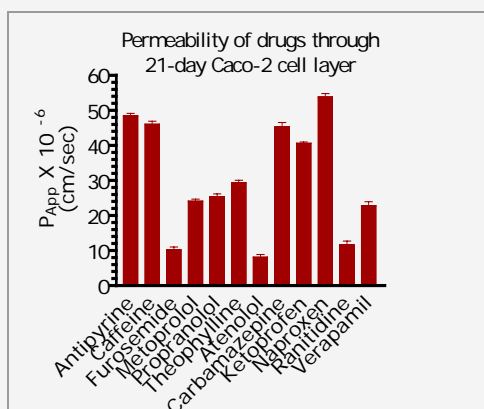


## Caco-2 cell permeability assay of drugs/ NCEs

<b>Cell</b>	: Caco-2, 10,000 cells/well, 21 days cell growth
<b>Assay Design</b>	: 96 well Caco-2 permeability plate
<b>Drug conc.</b>	: 50mM in HBSS, pH 6.5, 0.5% DMSO (N=7)
<b>Donor well</b>	: 100ml Drug solution
<b>Acceptor well</b>	: 250ml HBSS pH7.4
<b>Incubation</b>	: 37°C, 2 hrs
<b>Detection</b>	: Drug concentration in Acceptor well and initial conc in donor well, with/out linearity
<b>Membrane integrity test</b>	: Lucifer Yellow permeation
<b>Detector</b>	: HPLC-UV/Vis, fluorimetry

### Result of some compounds



## Caco-2 cell permeability assay of drugs/NCEs

Caco-2 permeability of Drugs	$P_{App} \times 10^{-6}$ (cm/sec)		Permeability Ranking		
	Chembiotek	Vendor	Chembiotek	Vendor	FDA
<b>Cell</b>	Caco-2	Sub clone TC7			
<b>Days</b>	21	Not known			
<b>Plate Format</b>	96 well plate, N=7	24 well plate, N=3			
<b>Antipyrine</b>	48.42	67.6	High	High	High
<b>Caffeine</b>	46.05	76.2	High	High	High
<b>Furosemide</b>	10.21	0.53	Low	Low	Low
<b>Metoprolol</b>	24.06	24.6	High	High	High
<b>Propranolol</b>	25.41	29.6	High	High	High
<b>Theophylline</b>	29.32	NA	High	NA	High
<b>Atenolol</b>	8.13	0.78	Low	Low	Low
<b>Carbamazepine</b>	45.26	70.1	High	High	High
<b>Ketoprofen</b>	40.6	61	High	High	High
<b>Naproxen</b>	53.82	89.9	High	High	High
<b>Ranitidine</b>	11.61	0.59	Low	Low	Low
<b>Verapamil</b>	22.85	19.7	High	High	High
<b>Amoxicillin</b>	13.62	NA	Low	Low	Low
<b>Phenacetin</b>	50.6	65.8	High	High	High
<b>Rifampicin</b>	9.83	1.97	Low	Low	Low
<b>Chloramphenicol</b>	22.81	16.2	High	High	High